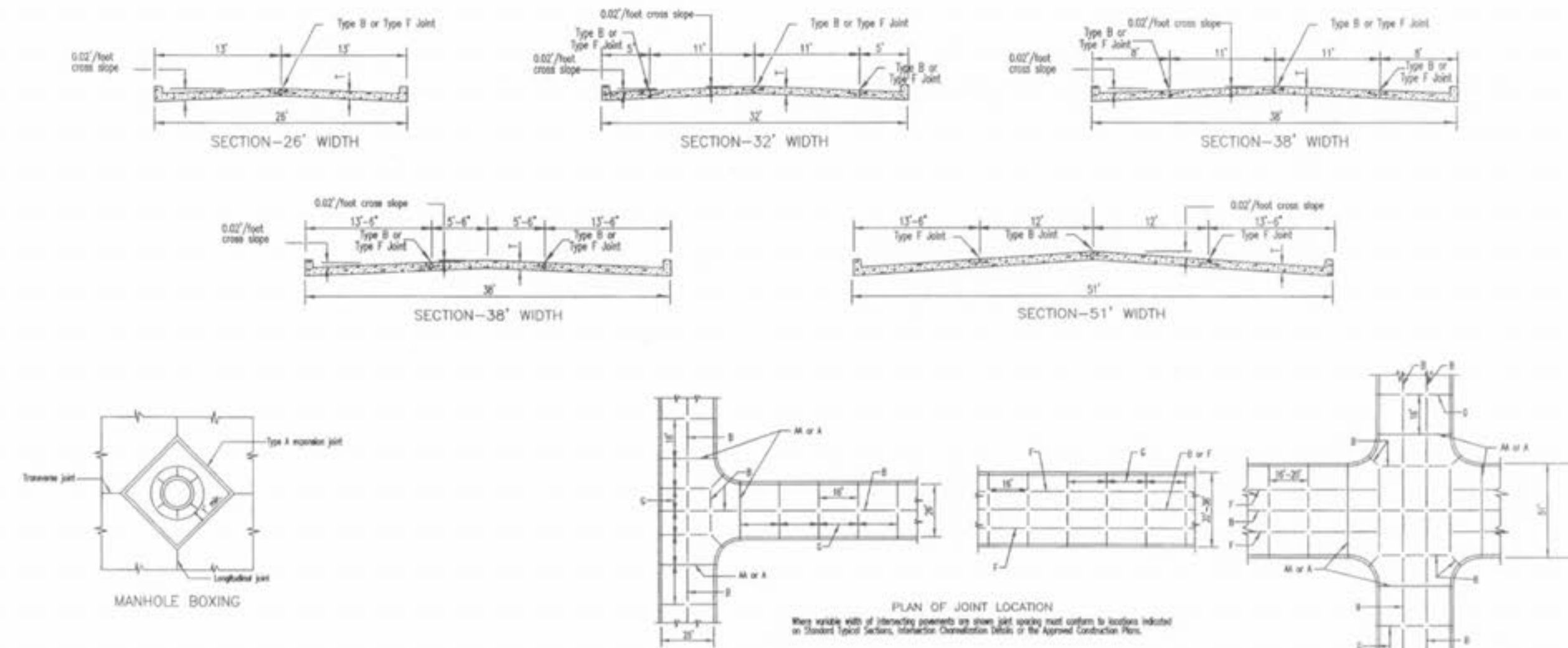


INTEGRAL VERTICAL CURB AND CONCRETE PAVEMENT TYPICAL SECTIONS AND DETAILS



GENERAL NOTES

- Do not scale drawing. Follow dimensions.
- All steel reinforcement shall be specified from the pavement and curb to separate joint, extend completely through curb and fill. Minimum coverage within the pavement limits shall be based on shown.
- When a joint falls within 5ft. of, or contacts, utility, manhole, or other structure, design joint to allow proper clear cut of opening to permit joint to set on original structure and fit of adjacent curbs of rectangular structure.
- Design configurations are shown in the "Traffic Construction Details".
- Construction joint and tie bars may be omitted when curb is poured monolithic with pavement.
- Minimum thickness for Pavement:
 - All Non-Residential Streets: 1"
 - All Arterial Streets: 5"
- Refer to Pavement Construction Details, Utility and Curb/Tie joint and for rebar placement. Note that width and location of each paved portion of the pavement may change. See Note 10.
- Transverse or longitudinal construction joints in slip formed pavements may be made with a spray or box if such device has been approved in advance by the Department.
- The locations of the Type B and Type F longitudinal construction joints in the sections may be interchanged for different widths of construction if approved by the Department.
- All 1/2" smooth steel bars 18% @ 12" cts. shall be epoxy coated.

NOTE

Joint filler material shall meet ASTM designations as follows:
 Bituminous type: ASTM D-334-03
 Non extruding & resilient bituminous type (Rubber): ASTM D-5249

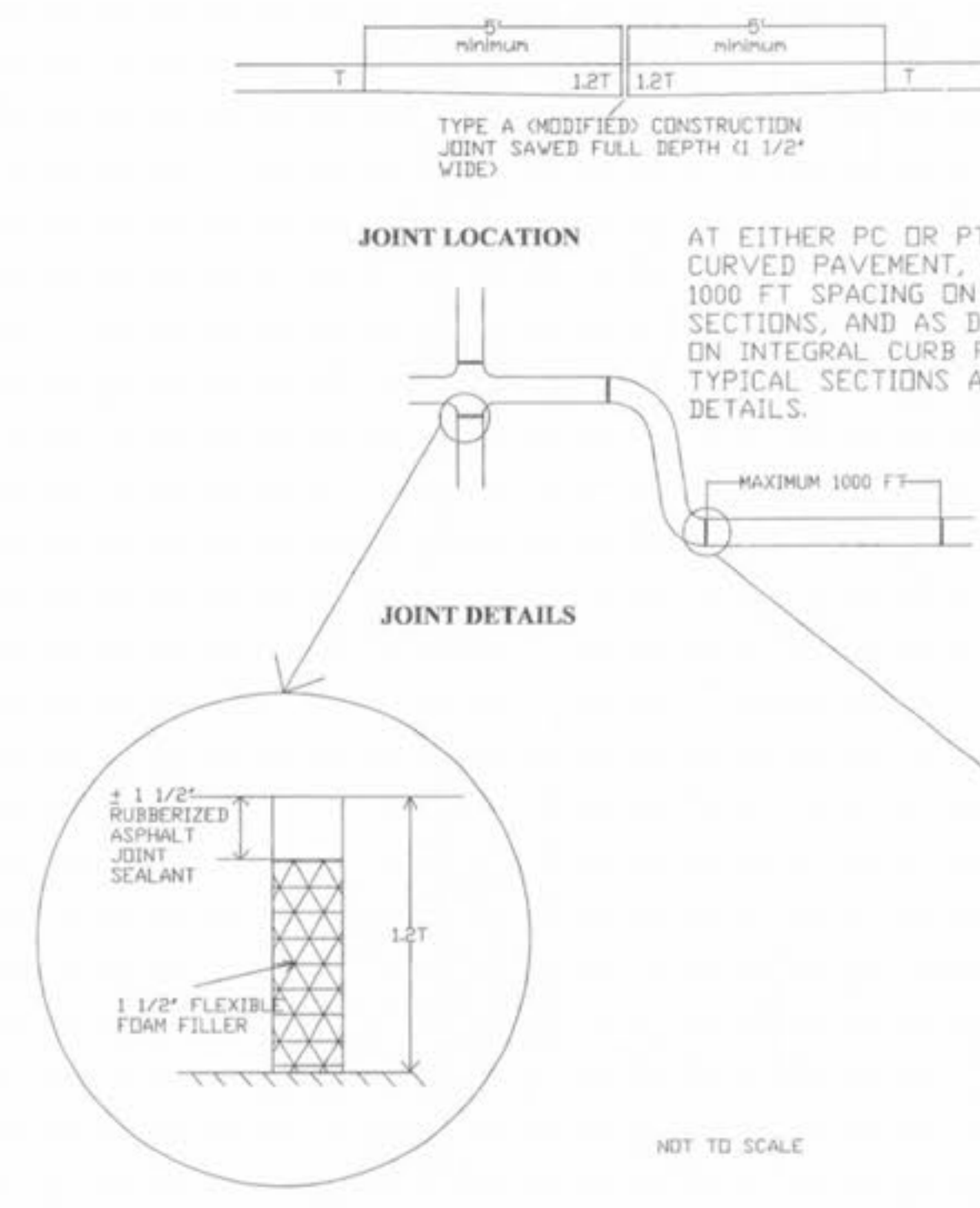
NOTE

Joint sealant material shall meet ASTM and AGHD designations as follows:
 Bituminous type: ASTM D-334-03
 Non extruding & resilient bituminous type (Rubber): ASTM D-5249

STREET	JOINT TYPE	JOINT AND BAR REQUIREMENTS
All Arterial, Non-Residential	Transverse	1/2" smooth steel bars 18% @ 12" cts.
25'-51' wide pavement	Longitudinal	1/2" smooth steel bars 18% @ 12" cts. At tie bars, for joint sections.
	Expansion	3/4" smooth steel bars 18% @ 12" cts.

SAINT CHARLES COUNTY
 HIGHWAY DEPARTMENT
 ST. CHARLES, MISSOURI
PAVEMENT CONSTRUCTION DETAILS
INTEGRAL VERTICAL CURB
AND CONCRETE PAVEMENT
TYPICAL SECTIONS AND DETAILS
 DATE: October, 2002 DRAWING: CS02.01

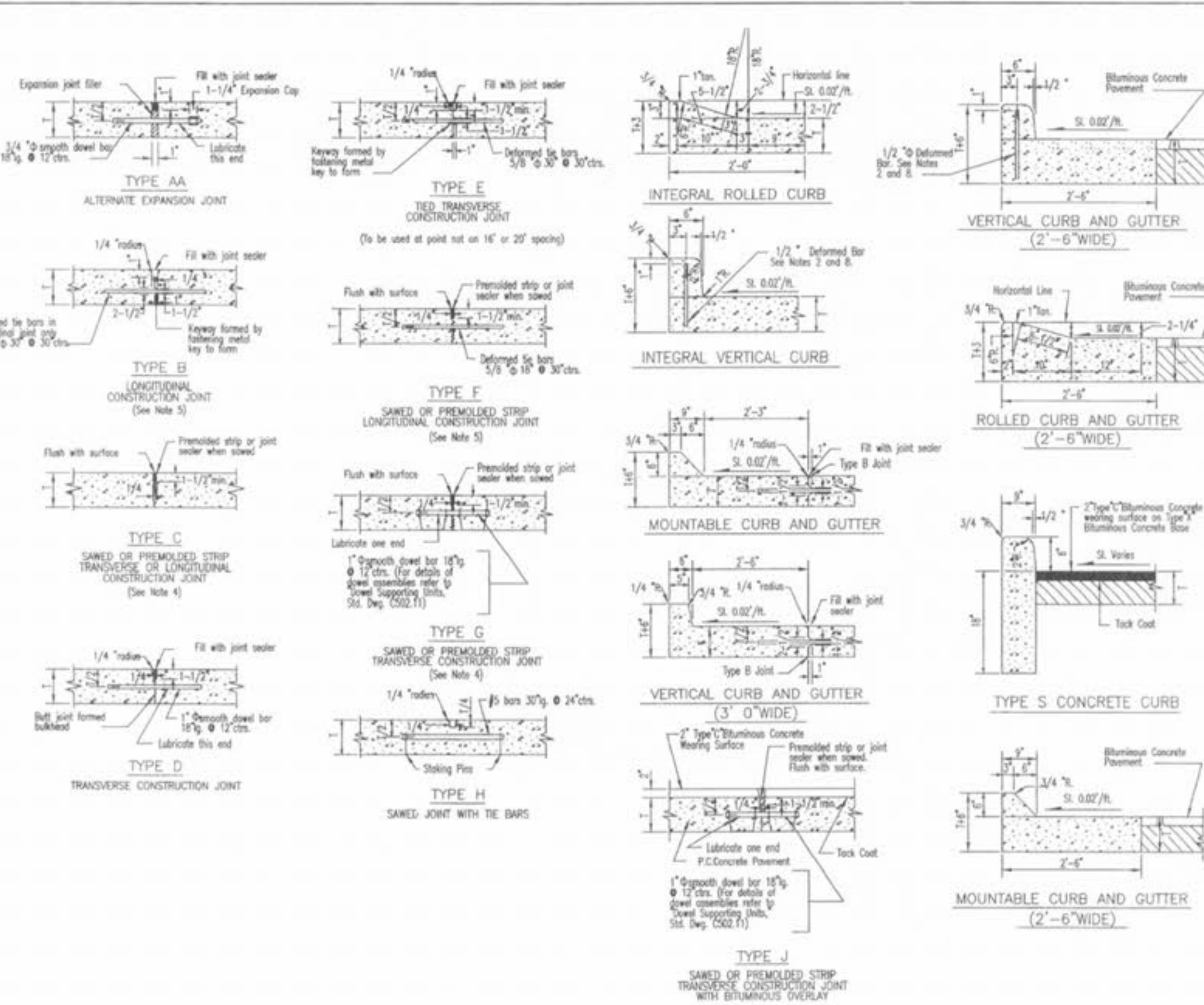
TYPE A (MODIFIED) CONSTRUCTION JOINT



NOTES:

- THE NUMBER OF BACKER RODS REQUIRED WILL VARY WITH THE PAVEMENT THICKNESS. BACKER RODS AND FLEXIBLE FOAM FILLER MUST EXTEND THROUGH THE FULL DEPTH OF THE PAVEMENT.
- JOINT FILLER SHALL BE A FLEXIBLE, NON-ABSORBENT, NON-GASSING, NON-STAINING, NON-SHRINKING MATERIAL, EXTRUDED FROM A CLOSED-CELL POLYMER, ASTM D-5249.
- JOINT FILLER COMPOSED OF CELLULAR FIBERS, ASTM D-1751, MAY BE USED AT DRIVEWAY, SIDEWALK, AND SEWER INLET AND MANHOLE LOCATIONS.
- SEE "INTEGRAL CURB DETAIL 'B' AT DRIVEWAYS" FOR EXPANSION JOINT REQUIREMENTS AT DRIVEWAY CONNECTIONS TO THE STREET AND THE GARAGE.

SAINT CHARLES COUNTY
 HIGHWAY DEPARTMENT
 ST. CHARLES, MISSOURI
PAVEMENT CONSTRUCTION DETAILS
Type "A" Expansion Joint
 DATE: Nov. 2002 DRAWING: CS02.04



GENERAL NOTES

- Do not scale drawing. Follow dimensions.
- Construction joint and tie bars may be omitted when curb is poured integral with pavement.
- Minimum thickness for Pavement:
 - All Residential Arterial and Local Streets: 1"
 - Residential Collector and Non-Residential Streets: 1 1/2"
 - All Arterial Streets: 5"
- Type "E" Transverse Joint is required for Arterial and Non-Residential Streets. Use Type "C" Transverse Joint for all others.
- For Substation or Meter, Street Lighting or concrete pavement, 1/2" smooth steel bars 18% @ 12" cts. shall be used for longitudinal joints and 1/2" smooth steel bars 18% @ 12" cts. shall be used for Type "E" longitudinal joints.
- Refer to Pavement Construction Details for Integral Vertical Curb and Concrete Pavement Typical Sections and Details, S&I Div. CS02.01 and Integral Rolled Curb and Concrete Pavement Typical Sections and Details, S&I Div. CS02.02 for joint and bar requirements. For different street classifications. Note that width and location of each paved portion of the pavement may change the type and location of joint required.
- All deformed bars for joints and curbs shall be 1/2" smooth steel bars conforming to ASTM A-615-75, Grade 60.
- Length of tie bars shall equal the thickness of the curb. Tie bars shall be placed at 24" centers.
- Transverse or longitudinal construction joints in slip formed pavements may be made with a spray or box if such device has been approved in advance by the Department.
- The free end of the steel bar for a length of at least 11 inches shall be coated with an approved grease.
- All steel bars 18% @ 12" cts. shall be epoxy coated.

SAINT CHARLES COUNTY
 HIGHWAY DEPARTMENT
 ST. CHARLES, MISSOURI
PAVEMENT CONSTRUCTION DETAILS
JOINTS AND CURBS
 DATE: September, 2002 DRAWING: CS02.03

SUMMARY OF QUANTITIES

SHT #	UNIT	TOTAL	ITEM	DESCRIPTION
4	5	6	7	
-	-	-	C.Y.	1 EARTHWORK (EXCAVATION)
-	-	-	C.Y.	2 EARTHWORK (EMBANKMENT WITH 15% SHRINKAGE)
-	-	-	C.Y.	3 HAUL ON/OFF MATERIAL
2,983	3,089	2,504	S.Y.	4 4" TYPE 'D' AGGREGATE BASE
31	-	-	S.Y.	5 4" TYPE 'I' AGGREGATE BASE (SHOULDER)
2,190	2,744	2,198	S.Y.	6 7" P.C. CONCRETE PAVEMENT (INCLUDING APPROACHES)
484	-	-	S.Y.	7 8" P.C. CONCRETE PAVEMENT (ENTRANCE @ HWY F)
31	-	-	S.Y.	8 1 1/2" TYPE 'C' OVER 6 1/2" TYPE 'X' ASPHALT SHOULDER
-	-	126	S.Y.	9 3" TYPE 'C' OVER 8" TYPE 'X' TEMPORARY ASPHALT CONNECTION
-	-	804	S.Y.	10 2" TYPE 'C' OVER 7 1/2" TYPE 'X' ASPHALT TRANSITION
858	802	1,099	L.F.	11 1.5" CONCRETE CURB AND GUTTER
158	350	267	L.F.	12 6" INTEGRAL CONCRETE CURB
61	-	-	L.F.	13 6" TYPE 'S' CONCRETE CURB
142	-	-	S.Y.	14 6" CONCRETE ISLAND
386	434	489	S.Y.	15 4" CONCRETE SIDEWALK
2	6	-	EA.	16 HANDICAP RAMPS
182	-	42	L.F.	17 SAWCUT
1	1	1	EA.	18 STORM MANHOLE
1	1	1	EA.	19 OUTFALL STRUCTURE
1	5	3	EA.	20 SINGLE CURB INLET
3	1	-	EA.	21 DOUBLE CURB INLET
-	-	6	EA.	22 AREA INLET
-	20	152	L.F.	23 12" RCP (IN PLACE)
248	111	213	L.F.	24 15" RCP (IN PLACE)
-	88	153	L.F.	25 18" RCP (IN PLACE)
-	140	-	L.F.	26 21" RCP (IN PLACE)
-	184	-	L.F.	27 24" RCP (IN PLACE)
-	180	-	L.F.	28 42" RCP (IN PLACE)
108	-	-	L.F.	29 TRIPLE 7x8x8 PRECAST BOX CULVERT
6	-	-	EA.	30 7x8x8 PRECAST BOX END SECTION W/CUTOFF WALL
3	-	-	EA.	31 15' FLARED END SECTION
1	-	-	EA.	32 21' FLARED END SECTION
-	1	-	EA.	33 24' FLARED END SECTION
-	1	-	EA.	34 42' FLARED END SECTION
629	803	126	TON	35 GRANULAR FILL
-	264	-	L.F.	36 24" STEEL CASING
1,422	-	-	S.Y.	37 RIP-RAP (MODOT TYPE '2')
22	-	-	S.Y.	38 RIP-RAP (MODOT 609.70C)
2	2	1	EA.	39 LIGHT STANDARD
4	8	-	EA.	40 STANDARD SIGN ASSEMBLY
2	6	-	EA.	41 TEMPORARY BARRICADE
177	-	-	S.F.	42 MODULAR BLOCK WALL (BRUTE)
129	-	-	L.F.	43 CHAIN LINK FENCE
653	812	729	S.Y.	44 SED. MULCH
-	-	-	L.S.	45 STRIPING
-	-	-	L.S.	46 TRAFFIC CONTROL
-	-	-	L.S.	47 REMOVAL OF IMPROVEMENTS

